

Appendix C: CMAQ Program: Eligibility, Requirements, and Rating Criteria

This Appendix is organized into Sections as follows: Project Solicitation Overview Information; Project Eligibility Guidelines; and Project Evaluation and Scoring Guidelines.

Sponsors must meet the Basic Program Requirements A through G, found in the TAP-CMAQ Guidebook, Chapter 1 in addition to the CMAQ specific requirements contained in this Appendix. As discussed on Pages 8 and 9 of the Guidebook, CMAQ projects must fall into one or more program categories, and demonstrate an air quality benefit, to be eligible for funding under this program.

Part 1: Project Solicitation Overview Information

The CMAQ Program supports surface transportation projects and other related efforts that contribute to air quality improvements and provide congestion relief in areas that are currently classified or were previously classified as nonattainment or maintenance for one or more of the pollutants that compose the [National Ambient Air Quality Standards](#) (NAAQS).¹

To be eligible for this solicitation, only projects located in one or more of the following counties are eligible to receive CMAQ funding under this solicitation:

Region	Counties	MPO
1	Albany, Rensselaer, Saratoga, Schenectady	CDTC
	Greene	N/A
2	Montgomery	N/A
3	Onondaga	SMTTC
4	Genesee, Livingston, Monroe, Ontario, Orleans, Wayne	GTC
5	Erie, Niagara	GBNRTC
	Chautauqua	N/A
7	Jefferson	WJCTC
8	Dutchess	PDCTC
9	Schoharie	N/A

Objectives of this solicitation include:

- The reduction of emissions in non-attainment and maintenance areas
- The active management of travel demand through promoting and improving efficient modes (transit, rideshare, pedestrian and bicycle); and of the operational and emissions performance of the multi-modal (freight and passenger) transportation system through effective congestion management strategies.
- Improvement of engine and fleet emissions performance.

To be considered for funding under CMAQ, all projects must contribute to a reduction in emissions. Applications must include a description and estimation of how the proposed project will reduce emissions. There are three basic strategies for reducing emissions, which differ in significance by project type, that Sponsors should consider and assess when framing the benefits of their proposed project:

¹ See <http://www.epa.gov/criteria-air-pollutants/naaqs-table>

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- Reduce the number of single occupant vehicle (SOV) trips on the highway network.
- Reduce idling of vehicles in traffic by improving traffic flow.
- Improve the efficiency in the operation of fleet engines through emissions reducing technology or operating practices.

Eligible Project Types:

CMAQ Project Types	FHWA CMAQ Eligible Activities
Travel Demand Management/Rideshare	<ul style="list-style-type: none">• Rideshare Programs• Park and Ride• Employee Transit Benefits• Carsharing• Bikesharing• Education and Outreach
Congestion Reduction and Traffic Flow Improvements	<ul style="list-style-type: none">• Incident Management• Intersection Improvements• Signal Improvements• Roundabouts
Transit Improvements	<ul style="list-style-type: none">• Transit Service Expansion• Park and Ride• Employee Transit Benefits
Freight Intermodal Projects	<ul style="list-style-type: none">• Intermodal Freight Facilities and Programs• Truck Stop Electrification• Heavy Vehicle Engine Replacements
Pedestrian Bicycle	<ul style="list-style-type: none">• Pedestrian and Bicycle Paths (that are not solely for recreation)• Bikesharing
Alternate Fuel and Clean Vehicle	<ul style="list-style-type: none">• Heavy Vehicle Engine Replacements• Diesel Retrofit Technologies• Extreme-Temperature Cold-Start Technologies• Dust Mitigation• Natural Gas Re-Fueling Infrastructure• Electric Vehicle Charging Stations

For each of these project types, the Application includes tables, specific to the proposed project category selected by the Sponsor, that require the Sponsor to provide information regarding diversion of vehicle trips, improved traffic flow and efficient vehicle technology. This information will be analyzed by the NYSDOT using its CMAQtraq tool to calculate the estimated emission reductions from each project Application, and to assess the eligibility and merits of each Application.² (See Appendix E and F for the Detailed Application Instructions and the Application, respectively). Program Guidance, including program emphasis within this solicitation and emissions benefit calculation, is provided below.

² The NYSDOT calculates the project emissions benefits based on information provided by the applicant. The emission factors will be generated by the NYSDOT's CMAQtraq2013 program, based on the United States Environmental Protection Agency (USEPA) Motor Vehicle Emissions Simulator Model (MOVES).

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Travel Demand Management (TDM) /Rideshare:

Program Emphasis: This category of project includes programs or initiatives that are intended to reduce emissions by diverting SOV travel to more efficient modes or to less congested times of day. Strategies that are applied may include traveler information and assistance, employer or public education and outreach regarding alternative modes or congestion avoidance, incentives for efficient travel, or supportive infrastructure such as park and rides.

Emissions Reduction Framework: TDM/Rideshare programs support the reduction of emissions by diverting SOV trips to more efficient modes such as carpool, transit, bicycle pedestrian, telecommuting or other alternative..

Congestion Reduction and Traffic Flow Improvements

Program Emphasis: This category of project includes transportation system operational activities and strategies as well as infrastructure investments intended to reduce congestion and increase reliability of the multimodal transportation network.

Emissions Reduction Framework: Congestion reduction and traffic flow projects support the reduction of emissions by reducing delay and idling associated with recurring and non-recurring bottlenecks.

Transit Improvements:

Program Emphasis: New York State provides unparalleled levels of operating assistance to support public transportation. Transit improvement projects that leverage this investment to increase ridership and divert SOV may include 3 (and in some cases up to 5) years (see p. C-15 for more information) of operating assistance for new transit services, capital investments in transit vehicles, facilities or amenities or promotion of transit services or incentives.

Emissions Reduction Framework: Transit improvements support the reduction of emissions by diverting SOV trips to transit. Sponsors will need to document assumptions regarding the number and mileage of SOV trips diverted. Any additional transit vehicle activity (number of additional vehicle miles of travel and speed of those vehicles) emissions offsets (increases) also must be included in the analysis when applicable. The transit project must have a net emissions benefit to be eligible for CMAQ funding.

Freight Intermodal Projects

Program Emphasis: This category of project includes infrastructure, operational strategies or clean vehicle/alternate fuel programs oriented toward reducing emissions related to freight transportation/goods movement.

Emissions Reduction Framework: Three emission reduction strategies may apply to freight projects. Intermodal projects may divert truck miles to more efficient modes, traffic flow investments to eliminate freight bottlenecks may reduce truck idling and speed based emissions and clean engine and alternative fuel fleet programs may directly reduce emissions. The Application provides a table to document assumptions regarding these factors as they pertain to freight intermodal projects.

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Pedestrian Bicycle:

Program Emphasis: This project category includes programs or initiatives that are intended to reduce emissions by diverting SOV travel to walking or biking. This may include new infrastructure such as trails, connections or gap filling of exiting pedestrian and bicycle networks, initial operating of bikesharing programs or promotion of walking and biking modal option travel information.

Pedestrian and bicycle infrastructure is an eligible activity under both CMAQ and TAP. However, to be eligible for the CMAQ program, the project must meet additional requirements relating to emission reduction. Within the CMAQ program, pedestrian and bicycle projects will be competing with other project types described here for funding in part based upon their contribution to emissions reduction. To be eligible for CMAQ funding, proposed bicycle and pedestrian facilities must not be exclusively recreational, that is, they must reduce non-recreational vehicle trips. This is not a requirement in the TAP project selection process for these projects.

Emissions Reduction Framework: Pedestrian and bicycle projects support the reduction of emissions by diverting SOV trips to walking or biking.

Alternate Fuel and Clean Vehicle

Program Emphasis: This project category includes projects and programs that are intended to reduce emissions from school and transit buses, refuse trucks, port related drayage trucks, locomotives, and construction equipment by funding engine replacements, installation of tailpipe emission control devices, and the deployment of alternative fueling stations or electric charging stations.

Emissions Reduction Framework: Alternative fuel, retrofit and clean vehicle projects reduce emissions by taking older higher emitting engines out of service and replacing them with newer lower emitting engines, or installing verified emission reduction systems such as particulate traps and oxidation catalysts on diesel engines, or providing financial incentives to pay for the incremental cost of purchasing advanced vehicles, such as electric trucks instead of comparable conventionally fueled vehicles.

Part 2: Project Eligibility Guidelines: General Conditions

Project Location:

The project must be in one or more of the designated counties to be considered for funding under this³ CMAQ solicitation (See page C-1).

Project Eligibility Requirements:

To be considered for CMAQ funding opportunities, projects must:

³ The CMAQ solicitation for projects in Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, and Westchester Counties is handled by the New York Metropolitan Transportation Council <http://www.nymtc.org/Regional-Planning-Activities/Funding-Programs/CMAQ>. The CMAQ solicitation for projects in Orange County is handled by the Orange County Transportation Council, <http://www.orangecountygov.com/content/124/9893/default.aspx>

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- Be a transportation project,
- Generate an emissions reduction,
- Be located in or benefit an air quality nonattainment or maintenance area;⁴ and

CMAQ Program Funds May Not Be Used For:

1. Routine maintenance and rehabilitation projects (e.g., replacement-in-kind of track or other equipment, reconstruction of bridges, stations, and other facilities, and repaving or repairing roads) are considered capital investments that maintain an existing condition, and therefore do not reduce emissions.
2. Routine preventive maintenance for transit vehicles as it only returns the vehicles to baseline conditions.
3. General studies that fall outside specific project development, e.g. major investment studies, commuter preference studies, modal market polls or surveys, transit master plans, and others.
4. Light-duty vehicle scrappage programs.
5. Projects that add new capacity for SOVs, unless construction is limited to high-occupancy vehicle (HOV) lanes.
6. Administrative costs e.g., support for a State's "CMAQ Project Management Office" or litigation costs associated with the program or other federal aid projects.
7. Projects that do not meet the specific eligibility requirements of Titles 23 and 49, United States Code.
8. Stand-alone projects to purchase fuel. Aside from fuel acquisitions that are part of a transit operating support effort, stand-alone purchase of any fuel alternative or otherwise, is not an eligible CMAQ cost.
9. Acquisition, operation, or development of models or monitoring networks, which include, but are not limited to, traffic operations, travel demand or other related variables that do not directly lead to an emissions reduction.
10. Marginal projects that support freight operations in a very tangential manner are not eligible for CMAQ funding. Warehouse handling equipment, for example, is not an eligible investment of program funds. Warehouses, themselves, or other similar structures, such as transit sheds, bulk silos or other permanent, non-mobile facilities that function more as storage resources are not eligible.
11. Salaries for administration, maintenance costs, and other items akin to operational support for bicycle and pedestrian programs.
12. Construction of telecommuting centers and computer and office equipment purchases should not be supported with CMAQ funds.
13. A project to buy or lease vans that would directly compete with or impede private sector initiatives. Consultation with the private sector prior to using CMAQ funds to purchase vans, and if private firms have definite plans to provide adequate vanpool service, CMAQ funds should not be used to supplant that service.
14. More than five years of Operating Assistance for new transit services.

⁴ For more information about Clean Air Act nonattainment and maintenance areas go to <https://www3.epa.gov/airquality/greenbook/>

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Eligible Projects – Detailed Information

The general project types eligible for CMAQ funding include:

1. Diesel Engine Retrofits & Other Advanced Truck Technologies

Eligible projects include:

- Diesel engine or full vehicle replacement; full engine rebuilding and reconditioning; and purchase and installation of after-treatment hardware, including particulate matter traps and oxidation catalysts, and other technologies; and support for heavy-duty vehicle retirement programs. Installation of vehicle-to-infrastructure communications equipment is also eligible.

Project agreements involving replacements for either engines or full vehicles should include a provision for disposal or destruction of the engine block, verification that the engine is no longer contributing emissions in the nonattainment or maintenance area, or for other processes at the State's discretion that track the retirement of the vehicle or engine.

- The purchase and installation of emission control equipment on school buses.
- The purchase and installation of after-treatment hardware or repowering (e.g. with a hybrid drive train) for conventionally fueled airport parking lot shuttles.
- Refueling, when it is required to support the installation of emissions control equipment, repowering, rebuilding, or other retrofits of non-road engines.
- Equipment, technology, and outreach activities that provide information exchange and technical assistance to diesel owners and operators on retrofit options. These projects may include the actual education and outreach program, construction or acquisition of appropriate classroom buildings, and other efforts to promote the use of retrofit technologies.
- Non-road mobile source projects that include locomotive retrofits and the acquisition of clean locomotives, such as railyard switchers and shunters that fit the generator-set criterion.
- Upgrades to long-haul heavy-duty diesel trucks with verified advanced technologies, e.g. idle reduction devices, cab and trailer aerodynamic fixtures, and single-wide or other efficient tires, to reduce NO_x emissions and save fuel.

NOTE: CMAQ eligible after-treatment and other on-board emission control devices are restricted to devices specifically verified by the United States Environmental Protection Agency or the California Air Resources Board (CARB).⁵

⁵ For the lists of verified technologies, see <https://www.epa.gov/verified-diesel-tech> and <http://www.arb.ca.gov/diesel/cv.htm>.

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2. Idle Reduction

Eligible projects include:

- Idle reduction projects that reduce emissions and are located within, or in proximity to and primarily benefiting, a nonattainment or maintenance area.

The geographic requirement mainly applies to off-board projects, i.e., truck stop electrification (TSE) efforts. If CMAQ funding is used for an on-board project (i.e. auxiliary power units, direct fired heaters, etc.) the vehicle, usually a heavy-duty truck, should travel within, or in proximity to and primarily benefiting, a nonattainment or maintenance area. Idle reduction devices are verified by the USEPA.

Commercial idle reduction facilities cannot be located within rest areas of the Interstate right-of-way (ROW).

- Projects intended to reduce emissions from extreme cold-start conditions, including retrofitting vehicles and fleets with water and oil heaters and installing electrical outlets and equipment in publicly owned garages or fleet storage facilities.

3. Congestion Reduction & Traffic Flow Improvements

Eligible projects include:

- Traditional traffic flow improvements, which demonstrate net emissions benefits through congestion relief, including:
 - Construction of roundabouts,
 - HOV lanes
 - Left-turn or other managed lanes,
- Intelligent Transportation Systems (ITS), including traffic signal synchronization projects, traffic management projects, and traveler information systems, that are effective in relieving traffic congestion, enhancing transit bus performance, and improving air quality. Projects with the greatest potential for improving air quality include:
 - Regional multimodal traveler information systems
 - Traffic signal control systems
 - Freeway management systems
 - Electronic toll-collection systems
 - Transit management systems
 - Incident management systems
- Transportation Management Centers (TMCs) or Traffic Operations Centers that can be shown to produce air quality benefits, and whose expenses are incurred from new or additional capacity. The operating assistance limits discussed on page C-15 in this Appendix apply.
- Projects or programs that involve the purchase of integrated, interoperable emergency communications equipment.

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4. Freight Improvements

Eligible projects and programs include those that target freight capital costs-rolling stock or ground infrastructure-provided that air quality benefits can be demonstrated. Freight projects that reduce emissions fall generally into two categories: primary efforts that target emissions directly or secondary projects that reduce net emissions.

- Successful primary projects include new diesel engine technology or retrofits of vehicles or engines for highway projects and non-road mobile freight projects including rail and port-related freight operations.
- Secondary projects reduce emissions through modifications or additions to infrastructure and the ensuing modal shift. Support for an intermodal container transfer facility may be eligible if the project demonstrates reduced diesel engine emissions when balancing the drop in truck VMT against the increase in locomotive or other non-highway activity.

Intermodal facilities, such as inland transshipment ports or near/on-dock rail, may generate substantial emissions reductions through the decrease in miles traveled for older, higher-polluting heavy-duty diesel trucks. This secondary, indirect effect on truck traffic and the ensuing drop in diesel emissions help demonstrate eligibility.

The transportation function of these freight/intermodal projects should be emphasized in order for these projects to be eligible.

- Equipment that provides a transportation function or directly supports this function is eligible, such as railyard switch locomotives or shunters that fall into the generator-set or other clean engine category.
- Large-scale container gantry cranes, or other heavy-duty container handling equipment that is a clear link in the intermodal process.
- On the ground operations side of aviation, the purchase or retrofit of airport handling equipment, including baggage handlers, aircraft tow motors, and other equipment that plays a role in this intermodal link.

5. Transit Improvements

Generally transit project eligibility for funding is determined by whether or not the project increases transit capacity, resulting in an increase in transit ridership and a potential reduction in congestion. Quantified estimates of the project's emissions benefits must accompany the application.

Eligible projects include:

- New transit facilities (e.g., lines, stations, terminals, transfer facilities associated with new or enhanced public transit, passenger rail, or other similar services).
- Rehabilitation of a facility if the vast majority of the project involves physical improvements that will increase transit service capacity. Supporting documentation must show an expected increase in transit ridership that is more than minimal. If the vast

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majority of the project involves capacity enhancements, other elements involving refurbishment and replacement-in-kind also are eligible.

- New transit vehicles (bus, rail, or van) to expand the fleet or replace existing vehicles. Transit agencies are encouraged to purchase vehicles that are most cost-effective in reducing emissions. Diesel engine retrofits, such as replacement engines and exhaust after-treatment devices, are eligible if certified or verified by the USEPA or California Air Resources Board (CARB). Other transit equipment may be eligible if it represents a major system-wide upgrade that will significantly improve speed or reliability of transit service, such as advanced signal and communications systems.
- Operating assistance, including the purchase of fuel, associated with the introduction of new transit service or expansion of existing transit service.

6. Bicycle and Pedestrian Facilities and Programs

Eligible projects include:

- Constructing bicycle and pedestrian facilities (paths, bike racks, support facilities, etc.) that are not exclusively recreational and reduce vehicle trips.
- Non-construction outreach related to safe bicycle use.

7. Travel Demand Management

Travel demand management (TDM) encompasses a diverse set of activities that focus on physical assets and services that provide real-time information on network performance and support better decision-making for travelers choosing modes, times, routes, and locations. These projects can help ease congestion and reduce SOV use, contributing to mobility, while enhancing air quality and saving energy resources. Similar to Intelligent Transportation Systems (ITS) and Value Pricing, today's TDM programs seek to optimize the performance of local and regional transportation networks.

Eligible activities must be explicitly aimed at reducing SOV travel and associated emissions, and include:

- | | |
|---------------------------------|---|
| • Fringe Parking | • Parking pricing |
| • Traveler information services | • Variable road pricing |
| • Shuttle services | • Telecommuting/Teleworking |
| • Guaranteed ride home programs | • Employer-based commuter choice programs |
| • Carpools, vanpools | |
| • Traffic calming measures | |

Funding may support capital expenses and operating assistance to administer and manage new or expanded TDM programs. Marketing and outreach efforts to expand use of TDM measures may be funded indefinitely, but only if they are broken out as distinct line items.

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8. Carpooling, Vanpooling, Ridesharing, and Car Sharing

Eligible activities include:

- Carpool/vanpool marketing covers existing, expanded, and new activities designed to increase the use of carpools and vanpools, and includes purchase and use of computerized matching software and outreach to employers. Guaranteed ride home programs are also considered marketing tools. Marketing costs may be funded indefinitely.
- Vanpool and car sharing program vehicle capital costs include purchasing or leasing vehicles for use in vanpools and car sharing programs. Eligible operating costs (see C-15) include empty-seat subsidies, maintenance, insurance, administration, and other related expenses. Prorated cost sharing plans that establish grant proportions for undefined shares of capital and operating costs need to be broken down to the specific components or line items that establish the capital-operating shares.

9. Alternative Fuels and Vehicles

Eligible projects that promote the use of electricity, biofuels, compressed natural gas and advanced battery technologies can receive funding to only cover the incremental cost of the alternative fuel vehicle or fueling system beyond the cost of an equivalent conventionally fueled vehicle or fueling system.

Eligible projects include:

- The purchase of publicly-owned non-transit alternative fuel vehicles, including passenger vehicles, service trucks, street cleaners, and others. Only publicly owned vehicles providing a dominant transportation function can be fully funded, such as paratransit vans, incident management support vehicles, refuse haulers, and others.
 - Costs associated with converting fleets to run on alternative fuels are also eligible.
 - When non-transit vehicles are purchased through Public Private Partnerships PPPs, only the cost difference between the alternative fuel vehicles and comparable conventional fuel vehicles is eligible. Such vehicles should be fueled by one of the alternative fuels identified in section 301 of the 1992 Energy Policy Act or biodiesel.⁶
- Alternatives to diesel engines and vehicles. Alternative fuel vehicle projects that are implemented as diesel retrofits and involve the replacement of an operable engine—not standard fleet turnover—would be eligible for full Federal participation, i.e. an 80 percent Federal share of the full vehicle cost.

⁶ In the 1992 Energy Policy Act of 1992 'alternative fuel' means methanol, denatured ethanol, and other alcohols; mixtures containing 85 percent or more (or such other percentage, but not less than 70 percent, as determined by the Secretary, by rule, to provide for requirements relating to cold start, safety, or vehicle functions) by volume of methanol, denatured ethanol, and other alcohols with gasoline or other fuels; natural gas; liquefied petroleum gas; hydrogen; coal-derived liquid fuels; fuels (other than alcohol) derived from biological materials; electricity (including electricity from solar energy); and any other fuel the Secretary determines, by rule, is substantially not petroleum and would yield substantial energy security benefits and substantial environmental benefits.

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- Certain hybrid vehicles that have lower emissions rates than their non-hybrid counterparts may be eligible for CMAQ investment. Hybrid vehicle models that are in part the focus of State legislation addressing HOV exemptions for alternative fuel and low emissions vehicles are considered eligible. Other hybrid vehicles will be assessed on a case specific basis, as there is no specific EPA regulation available to rate the lower emissions and energy efficiency advantages of the models involved.
- Projects involving heavier vehicles, including refuse haulers and delivery trucks, also may be appropriate for program support. Eligibility should be based on a comparison of the emissions projections of these larger candidate vehicles and other comparable models.
- Establishing publicly owned fueling facilities and other infrastructure needed to fuel alternative-fuel vehicles, unless privately-owned fueling stations are in place and reasonably accessible. Fueling facilities can dispense one or more of the alternative fuels identified in Section 301 of the 1992 Energy Policy Act or biodiesel, or provide recharging for electric vehicles.
- Converting a private fueling facility to support alternative fuels through a public-private partnership agreement.

Note: CMAQ-funds may only be used to establish or support refueling facilities within the Interstate ROW if these services are offered at no charge.

Important Considerations

Emission Benefits

Every effort must be taken to ensure that estimated air quality benefits are credible and based on a reproducible and logical analytical procedure that will yield valid quantitative results of emission reductions. Applicants must supply the required transportation data inputs that will allow NYSDOT to run the analysis for each project.

Net benefits from all emissions sources involved must be calculated for all applications. This requires that specific information be included in the application based on the project type. The table below describes the inputs required for each eligible project type. These required data elements are specified in detail in the Application Instructions.

Required Inputs for CMAQ Benefit Estimate Calculation	
Project Type	Required data
Travel Demand Management/ Rideshare	<ul style="list-style-type: none">• Number of vehicles affected by project (BEFORE)• Number of vehicles affected by project (AFTER)• Miles per day per vehicle (BEFORE)• Miles per day per vehicle (AFTER)• Days per year the project is anticipated to have an effect• Average speed of vehicles affected by project (BEFORE)• Average speed of vehicles affected by project (AFTER)

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Required Inputs for CMAQ Benefit Estimate Calculation	
Project Type	Required data
Congestion Reduction and Traffic Flow Improvements	<ul style="list-style-type: none"> • Number of vehicles affected by project (BEFORE) • Number of vehicles affected by project (AFTER) • Miles per day per vehicle (BEFORE) • Miles per day per vehicle (AFTER) • Days per year the project is anticipated to have an effect • Average speed of vehicles affected by project (BEFORE) • Average speed of vehicles affected by project (AFTER)
Transit Improvements	<ul style="list-style-type: none"> • Number of passenger vehicles affected by project (BEFORE) • Number of passenger vehicles affected by project (AFTER) • Miles per day per passenger vehicle (BEFORE) • Miles per day per passenger vehicle (AFTER) • Days per year of service operation • Number of additional transit buses (if applicable) • Average speed of additional transit buses (if applicable) • Average daily distance each additional bus will travel (if applicable)
Freight Intermodal Improvements	<ul style="list-style-type: none"> • Number of on-road freight vehicles affected by project (BEFORE) • Number of on-road freight vehicles affected by project (AFTER) • Type(s) of freight vehicles affected by project (e.g. single unit trucks or combination unit trucks, etc.) • Fuel Type of Freight Vehicles affected by project (BEFORE) • Fuel Type of Freight Vehicles affected by project (AFTER) • Days per year the project is anticipated to have an effect • Average speed of vehicles affected by project (BEFORE) • Average speed of vehicles affected by project (AFTER) • Hours of idle reduced per vehicle (if applicable) • Applicant supplied emission factors, if applicable (BEFORE) • Applicant supplied emission factors, if applicable (AFTER)
Pedestrian and Bicycle Facilities	<ul style="list-style-type: none"> • Number of vehicles affected by project (BEFORE) • Number of vehicles affected by project (AFTER) • Miles per day per vehicle (BEFORE) • Miles per day per vehicle (AFTER) • Days per year the project is anticipated to have an effect • Average speed of vehicles affected by project (BEFORE) • Average speed of vehicles affected by project (AFTER)
Pedestrian and Bicycle Facilities (Alternative Method)	<ul style="list-style-type: none"> • Segment length of roadway associated with project • Average Annual Daily Traffic Volume on associated roadway • Average speed of vehicles on associated roadway • Days per year bike lane is expected to be used for non-recreational travel • Percent trips in decimals of vehicle trips less than five miles in length in the project area • Bicycle Diversion Factor: Proportion of short trips (in decimals) anticipated to divert to bicycle mode after project is complete.

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Required Inputs for CMAQ Benefit Estimate Calculation	
Project Type	Required data
Alternative Fuel and Clean Vehicle Projects	<ul style="list-style-type: none">• Number of vehicles affected by project (BEFORE)• Number of vehicles affected by project (AFTER)• Fuel Type of vehicles affected by project (BEFORE)• Fuel Type of vehicles affected by project (AFTER)• Miles per day per vehicle (BEFORE)• Miles per day per vehicle (AFTER)• Days per year the project is anticipated to have an effect• Average speed of vehicles affected by project (BEFORE)• Average speed of vehicles affected by project (AFTER)• Type(s) of vehicles affected by project (e.g. single unit trucks or combination unit trucks, etc.)• Hours of idle reduced per vehicle (if applicable)• Applicant supplied emission factors, if applicable (BEFORE)• Applicant supplied emission factors, if applicable (AFTER)

NYSDOT will use the NYSDOT CMAQtraq software program to calculate each project's estimated emission benefits and to promote statewide consistency for the estimation of emission benefits. CMAQtraq enables the calculation of emission benefits using either the pre-loaded CMAQ emission factors or, where necessary, custom emission factors provided by the project sponsor or other source unique to a specific project or program. The applicant will be contacted if additional information is needed to complete the emissions analysis.

Use of CMAQ Program Funds:

Funds awarded through this program may be used for the purposes of:

1. Capital Investment:

- To establish new or expanded transportation projects or programs that reduce emissions, including capital investments in transportation infrastructure, congestion relief efforts, vehicle acquisitions, diesel engine retrofits, or other capital projects.

2. Operating Assistance:

- a. Limited to new transit, commuter and intercity passenger rail services, intermodal facilities, travel demand management strategies, including traffic management centers, inspection and maintenance programs, and the incremental cost of expanding these services.
 - Intended to start up viable new transportation services that can demonstrate air quality benefits and eventually cover costs as much as possible. Time-limited CMAQ assistance provides adequate incentive and flexibility while not creating a pattern of excessive or even perpetual support.
 - Other funding sources should supplement and ultimately replace CMAQ funds for operating assistance, as these projects no longer represent additional, net air quality benefits but have become part of the baseline transportation network.

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- b. Includes all costs of providing new transportation services, including, but not limited to, labor, fuel, administrative costs, and maintenance. Non-Federal share requirements still apply. Elements of operating assistance prohibited by statute or regulation are not eligible for CMAQ participation, regardless of their emissions or congestion reduction potential.
- c. Three years of operating assistance funding may be spread over a longer period, for a total of up to 5 sequential years of support. A Sponsor may propose to spread the third year amount (an amount not to exceed the greater of year 1 or year 2) across an additional 2 years (i.e. years 4 and 5) to provide an incremental, taper-down approach, while other funding is used for a higher proportion of the operating costs as needed (see below).

Example Allocations of CMAQ Funds for Operating Assistance						
Example	Year 1	Year 2	Year 3	Year 4	Year 5	Total
A	\$300	\$300	\$200	\$50	\$50	\$900
B	\$300	\$300	\$100	\$100	\$100	\$900
C	\$100	\$400	\$200	\$100	\$100	\$900

After the 5-year period, operating costs would have to be maintained with non-CMAQ funding, enabling a transition to more independent system operation. Amounts applied to years 1 and/or 2 are established at the discretion of the State or Sponsor.

3. Planning and Project Development:

Activities in support of other Title 23-eligible projects also may be appropriate for CMAQ investments. All phases of eligible projects: planning, preliminary engineering, design, right-of-way acquisition, construction/construction inspection are eligible for CMAQ funding. For example, studies that are part of the project development process (e.g., preliminary engineering) are eligible for CMAQ support.

4. Public-Private Partnerships (PPPs):

In a PPP, a private or non-profit entity's resources replace or supplement State or local funds and possibly a portion of the Federal-aid in a selected project. PPPs are a critical program element, given the growth of private sector involvement in such activities as freight and diesel retrofits. When considering PPP as a part of a CMAQ project, legally binding, written agreements between the public agency and the private or non-profit entity must be in place before CMAQ-funded project implementation. These agreements:

- Should be developed under relevant Federal and State law;
- Specify the intended use for CMAQ funding;
- Describe the roles and responsibilities of the participating entities; and
- Address how the disposition of land, facilities, and equipment will be carried out should the original terms of the agreement be altered (e.g., due to insolvency, change in ownership, or other changes in the structure of the PPP).

Public funds should not be invested where a strong public benefit cannot be demonstrated, CMAQ funds should be devoted to PPPs that benefit the general public by clearly reducing

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emissions, not for financing marginal projects. Other statutory restrictions and special provisions on the use of CMAQ funds in PPPs include:

- Eligible costs under this section should not include costs to fund an obligation imposed on private sector or non-profit entities under the Clean Air Act or any other Federal law. However, if the private or non-profit entity clearly is exceeding its obligations under Federal law, CMAQ funds may be used for that incremental portion of the project.

Eligible non-monetary activities that satisfy the non-Federal match requirements under the partnership provisions include the following:

- Ownership or operation of land, facilities, or other physical assets
- Construction or project management
- Other forms of participation approved by NYSDOT.

Sharing capital and operating project costs is a critical element of a successful public-private venture, particularly if the private entity is expected to realize profits as part of the joint venture. State and local officials are urged to consider a full range of cost-sharing options when developing a PPP, including a larger State/local match.

Costs and Other Regulatory Requirements

Projects must comply with other applicable Federal requirements, including those affecting determinations of eligible project costs. Refer to the [Procedures for Locally-Administered Federal Aid Projects](#) for more information.

Part 3: PROJECT EVALUATION CRITERIA AND SCORING GUIDELINES

Review Process: Projects will be evaluated based on the two-step process described below.

Step 1: The following criteria must be met for the project to move to the second evaluation step. A “No” answer to any of these questions will prevent the project from being further considered.

- Is the project in one of the 19 eligible counties?
- Does the project fit into one or more of the eligible CMAQ categories?
- Does the project submission include data so calculations of the estimated emission benefits for targeted pollutants (VOC, NO_x, CO, PM_{2.5}, PM₁₀) may be made?
- Does the project have an eligible Sponsor?
- Did the Sponsor attend the TAP-CMAQ Informational Workshop? (NYSDOT is exempt.)
- Does the project have the necessary matching funds?
- Is the Application complete? Are all project application attachments and supporting documentation included and was the Application submitted by the **October 21, 2016** deadline?
- Has the Sponsor demonstrated that the project is ready to go and can be completed within the established timeframe?

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Step 2: After clearing the above administrative steps, submissions will be evaluated and scored on the criteria below. The review team may also consider geographical distribution of Applications/Projects in this process.

Category	Evaluation Criteria	Available Points
Project Benefits & Proposed Solution	<ul style="list-style-type: none">How significant is the identified problem?How well does the proposed project address the stated problem?Is the proposed work technically feasible, and implementable?	20
Technical Benefits: Emission Reduction & Congestion Mitigation	Emission Reduction: <ul style="list-style-type: none">Reductions in targeted CO, ozone precursors: NO_x and/or VOC, PM_{2.5}, PM₁₀ in the area. Congestion Mitigation: <ul style="list-style-type: none">How well does the project reduce volume?How well does the project improve travel time?How well does the project improve modal options and accessibility?	30
Innovation	<ul style="list-style-type: none">How does this project include unique characteristics, consider new approaches or use innovative techniques to address the problem?Does the project include cost-effective solutions and/or creative/innovative ways to deliver the project?Does the project leverage other partnerships or fund sources?	20
Project Schedule and Budget	<ul style="list-style-type: none">Are the estimates reasonable for the scope and in relation to the schedule/timeline for completion?Does the schedule and budget reflect the steps needed to fully execute a federal-aid transportation project?Is the project timeframe to construction/implementation within 18 months?	20
Ability to Deliver the Project	<ul style="list-style-type: none">Sponsor's past performance using federal aid;Capacity to implement/begin construction within 18 months.	10
Total Points:		100